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THERAPEUTIC APPLICATION OF MM WAVES

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MMW or Extremely High Frequency (EHF) therapy represents a new treatment method based on the various biological effects created in organism by the low-intensity radiation in the millimeter range of spectrum.

The main hypotheses which try to explain biological and medical effects of MMW stress on the resonance mechanisms of interaction between MMW and biological objects. Also, molecules of water can be initial target of the EHF-radiation. An increase or decrease in hydration values of macromolecules leads to change in cell-membrane permeability, activity of the cell's c-AMP and so on. The final biological and medicinal effects are realized with the participation of nervous, cardiovascular, immune endocrine, "acupuncture channel" and other systems of the living organism.

There are 3 types of effects caused by MM radiation:
1. Specific effects associated with the frequency of MM radiation;
2. Non-specific effects related with the irradiated zone; and
3. Non-specific effectsdue to development of the General Adaptation Syndrome.

There are 3 basic versions of the EHF- or MMW-Therapy:
1. MMW-therapy with selection of individual frequency or Microwave Resonance Therapy;
2. MMW-therapy with selection of individual irradiated zones or points (EHF-Puncture);
3. General MMW-therapy, without selection of individual frequences or zones.

Now there exist enough theoretical, experimental, and clinical evidences that the acupunctural zone, rather than MMW frequency, plays the major role in enhancing the curing effect. The frequency determined only the rate at which the MMW radiation was absorbed or reflected by the water-containing structures of the skin,i.e. the stimulation intensity. Ultimate non-specific effects of MMW-therapy were realized by various regulatory systems of macro organisms.

Acupoints were found to be hyper-sensitive to MMW radiation, which may be explained by high hydratation of acupoints. Selection of acupoints, MMW exposure duration and number were most effectively determined by Traditional Chinese Medicine (TCM). The diagnosis of TCM determined selection of irradiated acupoints and modes of MMW-therapy.

Special medical devices of coherent and broadband „noiselike" radiation were developed in the CIS: „Artsakh", „Ariya", „Jav-1", „Electronika-EHF",etc. MMW-therapy has proved ist high efficiency in treatment of various diseases of digestive, respiratory, cardio vascular, and neural systems, as well as different syndromes and symptoms.